

# **Social reference and library reference services**

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## **Abstract**

Some of the fastest growing Web 2.0 segments are question-answering (Q&A) sites that involve a collaborative reference service - social reference. Social reference refers to online question answering services that are provided by communities of volunteers on Q&A sites. Because this collaborative group effort in answering question is comparable with library reference service in quality, the implementation of the social reference model to enhance reference service in library 2.0 is discussed.

## **Introduction**

As a result of the flourishing of Web 2.0 and its participatory social sites, such as Flickr, YouTube, Wikipedia, and Yahoo! Answers, along with the advent of ideas such as the wisdom of the crowd (Surowiecki, 2004), many traditional conceptions of information creation, dissemination, and use are being challenged. One of the fastest growing Web 2.0 segments is social reference on Q&A sites. Social reference refers to collaborative online question answering services that are provided by communities of volunteers on Q&A sites. These volunteers process millions of online information requests that are archived for future use. The increase in the popularity of these sites is remarkable; from 2006 to 2008, the number of visits to the top five Q&A sites increased by 889 percent (Hitwise, 2008). The biggest among these sites, Yahoo! Answers, includes over 23 million resolved questions and over 100 million users (Adamic et al., 2008; Dom, & Paranjpe, 2008). Yahoo! Answers, attracts the highest number of visits, with 74% percent of the market share of U.S. visits; WikiAnswers was second with 18% and Answerbag was third with 4% of visits (Hitwise, 2008). While social reference is flourishing, research on Q&A sites is in its infancy. Researchers have mostly focused on Yahoo! Answers (Adamic et al., 2008; Agichtein et al., 2008; Bian et al., 2008; Dom, & Paranjpe, 2008), and a few focused on other Q&A sites, such as Answerbag, and Google Answers (Gazan, 2007; Harper et al., 2008). The research on Yahoo! Answers addresses mainly questions in the domain of information retrieval and is mostly aimed at identifying answers of high quality in order to facilitate an automatic prediction of best answers (e.g., Agichtein et al., 2008; Bian et al., 2008; Dom, & Paranjpe, 2008). The quality of service varies from one site to another (O'Neill, 2007; Harper et al., 2008), and because answer quality on a single site varies as well, identification of the best answers is crucial.

Q&A sites resemble services that libraries provide. Both are socially-oriented entities whose primary focus is collecting, organizing and providing information

free to the public albeit under different auspices and operating practices. However, there are major differences between the volunteers, who answer questions on these Q&A communities and professional reference librarians, who answer questions at library (traditional and digital) reference desks. Volunteers on Q&A sites are not paid for their answers and are not required to hold a graduate library degree. Professional librarians, on the other hand, hold graduate degrees, are experts at question negotiation, use a wide variety of reliable, and authoritative information sources, and are being paid (by their employers). The "library reference transaction" significantly differs from the wiki-based transaction. Librarians are engaged in reference interviews, employing professional skills to identify users' needs, while the amateur volunteers base their answers on best practices and on their personal experience and knowledge. A librarian is likely to provide answers in a way that best fits the user's needs; for example, users with various educational levels require answers at different scope and depth. Yet, researchers report that Q&A sites outperformed library digital reference service (Harper et al. 2008; Shachaf, 2009) but on difficult questions, O'Neil (2008) argues that librarians' expertise is still in demand.

In an effort to examine the relationship between social reference and library reference services, and to look at the potential of collaborative social wiki based reference services for traditional library services, this paper reports findings from a comparative study that analyzes the quality of answers on three Q&A sites, and compares them with library reference services. The data was analyzed along three SERVQUAL quality variables (Parasuraman, 1985; Parasuraman, Zeithaml, & Berry, 1988): reliability (accuracy, completeness, verifiability), responsiveness and assurance. The level of service varies across sites, yet, some provide services that match, surpass, or resemble the level of services that are found in (traditional and digital) reference research. It was found that the wiki-based social reference model enable the provision of open, dynamic, and collaborative service that results in fast, accurate, and complete answers. Thus, it is argued that the collaborative group effort to answer questions can improve answer quality, as it utilizes and synthesizes knowledge and skills of all group members.

These findings raise the question: why does the quality of answers on Q&A sites match or surpass that of library reference services? Four possible explanations are suggested. First, it is possible that the wiki-based reference service has advantages over other library technologies that have been utilized in reference services thus far. To support this explanation, future research should compare the level of service that the same group of service providers (librarians) can provide by utilizing different technologies (wikis vs. other modes of reference service). Second, it is possible that volunteers on these Q&A site communities gain experience at answering questions over time, and that it is their experience enable them to provide service at the same level of professional reference librarians. Prior research found that as experience at answering questions increases, the importance of formal education for achieving high performance in

answering questions at the reference desk decreases (Saxton & Richardson, 2002). Third, the results may reflect differences in type of questions that are being asked at the library and at these sites. Future research should examine the variation in type of questions submitted on Q&A sites in comparison with those that librarians handle. Finally, it is likely that the collaborative group effort in answering questions is beneficial compared with the dyadic interactions at the library. Further research into the social reference model of reference service should illuminate this explanation.

Nonetheless, there are major limitations to the answers that users receive on Q&A sites, compared with the services that reference librarians provide. On most Q&A sites, users obtain several responses and it is up to the user to determine how to make sense of these responses. Most users cannot determine the quality of an answer to a question on a topic that they do not know enough about. Furthermore, these answers do not always rely on authoritative and reliable sources. Above all, librarians may argue that libraries and their reference services are not in the business of merely answering questions.

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### **Biography:**

Pnina Shachaf is an assistant professor at the School of Library and Information Science, Indiana University, Bloomington. Her research areas focus digital reference, social reference, virtual groups, and online mass collaboration on web 2.0 sites, such as Wikipedia and Q&A sites. Her publications appeared in *Information and Management*, *Journal of Academic Librarianship*, *Journal of Information Science*, *Journal of the American Society for Information Science & Technology*, *Library & Information Science Research*, *Libri*, and *Journal of Academic Librarianship*.